

## L890-40M32

### Stem Type LED with High Beam

L890-40M32 is an AlGaAs LED mounted on a TO-18 stem with a spherical glass ball lens. It is designed for high beam use.

On forward bias, it emits a spectral band of radiation which peaks at 880nm.

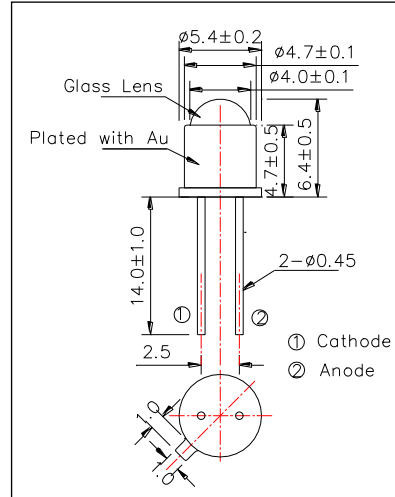
**<Features>**

- High Radiated Intensity
- High Reliability

**<Specifications>**

1. Product Name: Infrared LED Lamp
2. Type Number: L890-40M32
3. Chip:
  - Chip material: AlGaAs
  - Peak Wavelength: 880nm
4. Package
  - Type: TO-18 Stem
  - Lens: Spherical Glass Lens
  - Cap: Gold Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	150	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current*	IFP	500	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +80	°C	
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature**	TSOL	260	°C	

\* Duty=1% and Pulse Width=10μs.

\*\* Soldering condition must be completed within 3 second at 260 °C.

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.45	1.70	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	7	11.5		mW
Radiant Intensity**	IE	IF=50mA		40		mW/sr
Peak Wavelength	λP	IF=50mA	865	880	895	nm
Half Width	Δλ	IF=50mA		65		nm
Viewing Half Angle	θ1/2	IF=50mA		±10		deg
Rise Time	tr	IF=50mA		800		ns
Fall Time	tf	IF=50mA		400		ns

\* Measured by Photodyne #500

\*\* Measured by Tektronix J-6512

